ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
O'Neill Creek Culvert Replacement

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP tentatively plans to provide partial funding toward the removal of an undersized culvert and the installation of a bridge on O'Neill Creek. The overall goal is to improve fish passage and allow resident genetically pure westslope cutthroat trout and fluvial trout from the Clark Fork River to access habitat above the crossing.

I. Location of Project:

This project will be conducted on O'Neill Creek, a tributary to the Clark Fork River, between Garrison and Deer Lodge at the Spotted Dog Wildlife Management Area within Township 9N, Range 9W, Section 35 in Granite County (Figure 1).

II. Need for the Project:

One goal within FWP's six-year operations plan for the fisheries program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species."

This project improves habitat for genetically pure westslope cutthroat trout, a native species and Species of Concern in Montana. By upgrading an undersized fish culvert to a bridge, O'Neill Creek would be fully connected, and an additional 1.5 miles of habitat would be accessible to aquatic species. Connectivity and increased habitat are expected to improve fish populations throughout their life cycles as well as support genetic diversity of species.

III. Scope of the Project:

The project proposes to provide partial funding toward the removal of an undersized culvert and the installation of a bridge to reconnect O'Neill Creek (Figures 2, 3). The current culvert is undersized and blocking passage for at least part of the year, dependent on streamflow. The overall goal of this project

is to reconnect habitat for westslope cutthroat trout and other aquatic species. This project is expected to cost $34,870. Of this total, the FFIP would be contributing up to $15,250 to complete the project. The remainder would be matched from the other sources, including those listed below:

Contributor	In-kind services	In-kind cash
Habitat Montana		$6,000
Montana DNRC Anaconda Unit		$5,000
Natural Resource Damage Program		$4,370
FWP Construction		$4,250
Total Matching Funds: $19,620		

IV. Environmental Impact Review Checklist:

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment

Project Title: O'Neill Creek Culvert Replacement
Division/Bureau: Fisheries Division / Fish Management Bureau
Description of Project: The project would remove an undersized culvert and install a bridge on O'Neill Creek. The overall goal is to improve fish passage and allow resident genetically pure westslope cutthroat trout and fluvial trout from the Clark Fork River to access habitat above the crossing.

A. POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Geology and soil quality, stability and moisture				X		
2. Air quality or objectionable odors				X		
3. Water quality, quantity and distribution (surface or groundwater)			X			X
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality				X		
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X			X
8. Unique, endangered, or fragile wildlife or fisheries species			X			X
9. Introduction of new species into an area			X			X

10. Changes to abundance or movement of species			X			X

B. POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Noise and/or electrical effects				X		
2. Land use				X		
3. Risk and/or health hazards				X		
4. Community impact				X		
5. Public services/taxes/utilities				X		
6. Potential revenue and/or project maintenance costs				X		
7. Aesthetics and recreation				X		
8. Cultural and historic resources				X		X
9. Evaluation of significance				X		
10. Generate public controversy				X		

V. Explanation of Impacts to the Physical Environment

3. Water quantity, quality, and distribution.

No changes in streamflow would occur in O'Neill Creek as a result of the proposed project. Short-term increases in turbidity may occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. A 318 authorization will be obtained, if necessary, to meet short-term water quality standards.

7. Terrestrial or aquatic life and/or habitats.

This project would replace an undersized culvert with a bridge. The replacement would improve aquatic habitats by promoting natural stream morphology, correcting road drainage problems, and eliminating excess sediment delivery. Removal of the barrier will allow for upstream migration of westslope cutthroat trout and increase access to additional habitat. All changes are expected to be positive.

8. Unique, endangered, or fragile wildlife or fisheries species

This project will allow for upstream passage of westslope cutthroat trout, helping to ensure long-term persistence. It is a species of Concern in Montana and a genetically pure conservation population. Increased connectivity and available habitat tends to make populations more resilient

and numerous. Any changes are expected to be positive.

9. Introduction of new species into an area.

Removal of a culvert could open habitat to brown trout, which are not currently present in O'Neill Creek. There is no any indication brown trout will inhabit the area above the culvert as they are not present below the culvert. However, the culvert is an impediment to fish moving out of the Clark Fork River, so there is a possibility that brown trout could expand into the project area at some point in the future when the culvert is removed. However, brown trout are present in the Clark Fork River drainage, and this project would not actively expand their range.

10. Changes to abundance or movement of species.

The replacement of the culvert with an appropriately sized bridge will restore connectivity of O'Neill Creek. The structure will allow complete fish passage and overall movement is expected to increase, which will improve the amount of available habitat for fish species by 1.5 miles of stream. Additional habitat is expected to translate to increased survival and resiliency through additional places for fish to live, rest, grow, and move when there are threats. The impact is considered positive and is expected to positively impact westslope cutthroat trout in the O'Neill Creek and the Clark Fork drainage.

VI. Explanation of Impacts to the Human Environment

8. Cultural and historic resources.

No cultural or historical resource impacts are anticipated. However, the State Historical Preservation Office will be notified of the project, and any potential concerns will be addressed.

VII. Narrative Evaluation and Comment.

There are no anticipated cumulative effects.

VIII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative.

If no funding is provided through the FFIP, the applicant would have to seek additional sources of funding to complete the project, or O'Neill Creek would retain its passage barrier.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to restore stream function and migratory corridors in O'Neill Creek.

IX. Environmental Assessment Conclusion Section.

1. Other groups or agencies contacted or which may have overlapping jurisdiction:

Montana Department of Environmental Quality
Deer Lodge Valley Conservation District
U.S. Army Corps of Engineers
Montana Dept. of Justice - Natural Resource Damage Program
Other Montana State Agencies contributing funding to this project

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

None.

3. Is an EIS required?

No. We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

4. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP. The proposed project also will be reviewed by the Fish & Wildlife Commission, and funding will be contingent upon their approval. The EA will be distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: **www.fwp.mt.gov**.

5. Duration of comment period?

Public comment will begin January 2, 2020 and conclude at 11:59 PM, February 3, 2020.

6. Person(s) responsible for preparing the EA.

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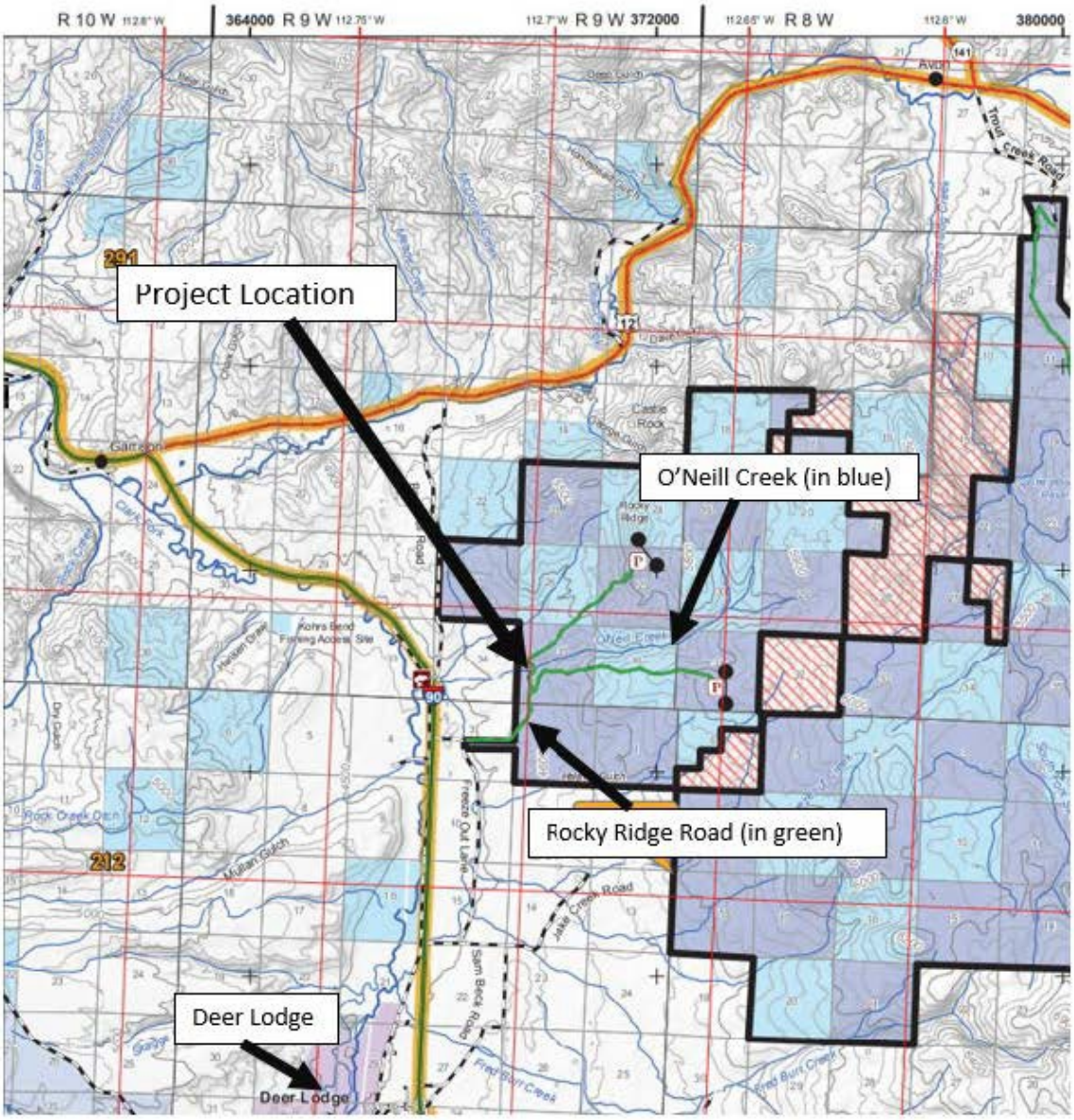

O'Neill Creek Project Location

Map excerpt from Montana FWP Spotted Dog Wildlife Management Area Interim Public Use Regulations map (2014).

FIGURE 1: Project location

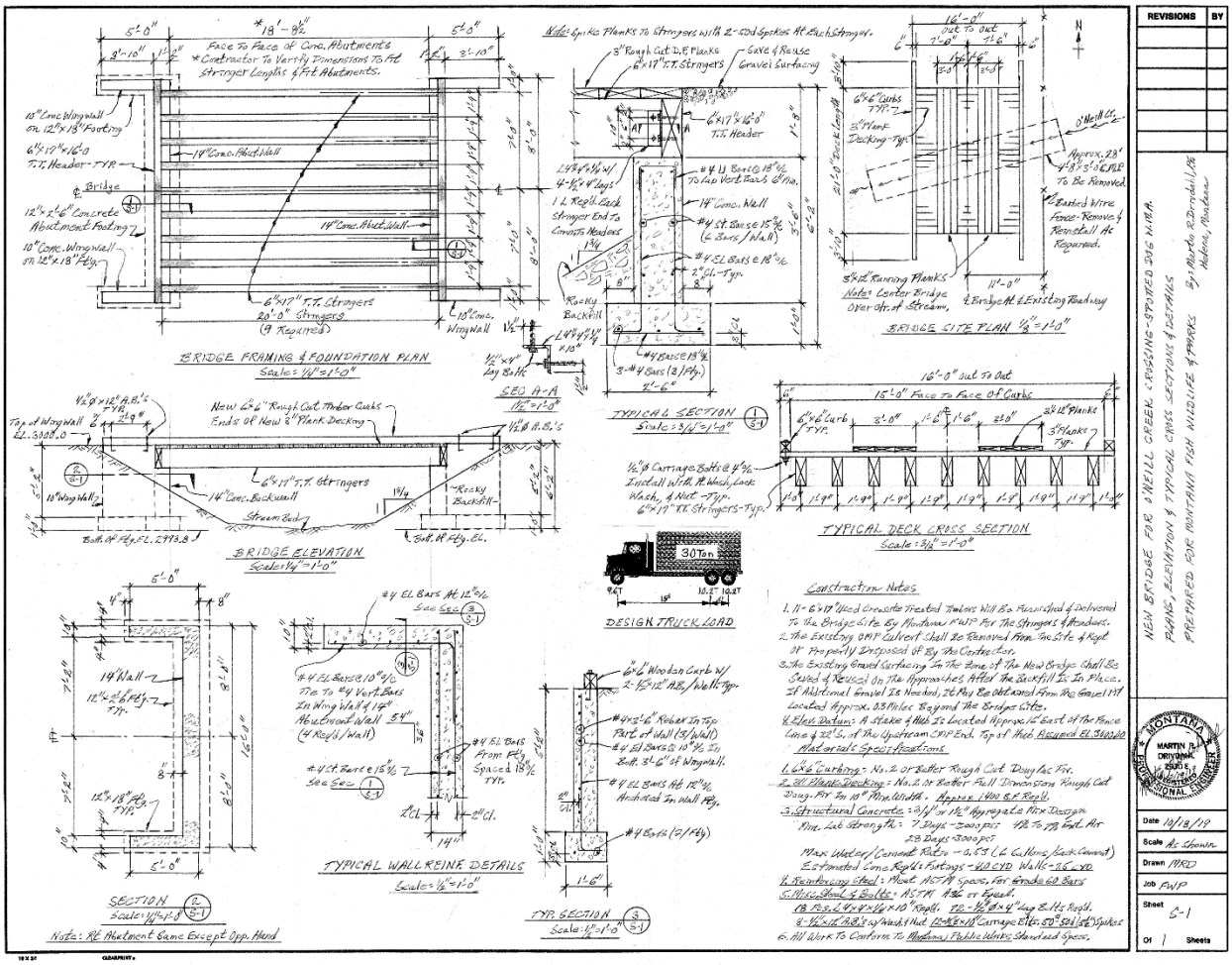

FIGURE 2: Design

FIGURE 3: Existing conditions